UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,264	12/31/2003	Todd Heintz	034300-000491	1753

7590 10/12/2007

Robert E. Krebs
Thelen Reid & Priest, LLP
P.O. Box 640640
San Jose, CA 95164-0640

EXAMINER	
PEREZ, ANGELICA	

ART UNIT	PAPER NUMBER
2618	

MAIL DATE	DELIVERY MODE
10/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/750,264	HEINTZ ET AL.	
	Examiner	Art Unit	
	Perez M. Angelica	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-53 and 55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-53 and 55* is/are rejected.

7)☒ Claim(s) *1* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: In line 7, the word said should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claim 29 recites the limitation "dial pad" in line 8. There is insufficient antecedent basis for this limitation in the claim. It should be "number dial pad"

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4, 10, 12-15, 17, 23, 25-28, 41-44 and 50, 52-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon Byoung-Seoup (Moon, US Patent No.: 7,130,669 B2) in view of Miramontes, Ivan (Miramontes, US 2002/0,072,395 A1).

Regarding claims 1 and 16, Moon teaches of a hand-held electronic device (figure 4), comprising: a housing having a display screen on a first portion, the display screen configured to display text and graphical information (figure 5, item 222 and column 5, lines 39-41, where when the apparatus is in an open position, as in figure 6, it operates as a PDA and where PDA's provide graphical information); a second portion of the housing having a number dial pad thereon, the second portion coupled to the first portion such that the first portion folds upward to reveal the number dial pad and the

display screen (figure 5, items 200, 240 and 260; column 5, lines 39-41, where when the apparatus is in a close position, as shown in figure 5, it operates as a telephone; thus, "number pad"); and a keyboard underneath the number dial pad (figure 6, items 204, 242 and 262) such that said number pad folds out sideways to reveal the keyboard (figure 6, items 24 and 26 fold out to reveal the keypad; column 5, lines 39-41, where when the apparatus is in an open position, as in figure 6, it operates as a PDA; thus, "keyboard"); at least one speaker to transmit audio information (figure 5, item 220); and at least one microphone for receiving audio data (column 5, lines 3-5).

Moon does not specifically teach where the number pad folds out sideways with respect to the housing about one hinge axis to reveal an entire keyboard and where the number dial pad and the second portion having a substantially similar width dimension.

In related art concerning a telephone with fold out keyboard, Miramontes teaches where the number pad folds out sideways with respect to the housing about one hinge axis to reveal an entire keyboard (figure 2) and where the number dial pad and the second portion having a substantially similar width dimension (figures 1 and 2, items 5 and 9 have the same dimensions).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's portable information device with Miramontes' folding of the number pad with respect to only one hinge axis reveling an entire keyboard in order to allow the user to easily entering text data with the keyboard, as taught by Miramontes.

Regarding claim 41, Moon teaches of a hand-held electronic device (figure 4), comprising: a housing having a display screen on a first portion (figure 5, item 222 and column 5, lines 39-41, where when the apparatus is in an open position, as in figure 6, it operates as a PDA and where PDA's provide graphical information); a second portion of the housing having an input member (figure 5, items 200, 240 and 260; column 5, lines 39-41, where when the apparatus is in a close position, as shown in figure 5, it operates as a telephone; thus, the number pad or keys correspond to the input member); the second portion coupled to the first portion (figure 5, items 22 and 20 coupled with a hinge); the first portion rotates about a first hinge axis to reveal the input member and the display screen (figure 5, where when the first portion 22 rotates about axis A2 of the hinge, the input member 20 (or, the keys form the keypad, in its defect) are revealed as well as display 222), the input member hingedly coupled to the second portion of the housing (figure 5, where hinge 21 couples the two) where the input member is rotatable about one second hinge axis perpendicular to the firs hinge axis to expose a keyboard being located underneath the input member (figure 6, items 204, 242 and 262 and figure 6, items 24 and 26).

Moon does not specifically teach where the number pad folds out sideways with respect to the housing about one hinge axis to reveal an entire keyboard and where the second portion having a width dimension substantially the same as a corresponding width dimension of the input member.

In related art concerning a telephone with fold out keyboard, Miramontes teaches where the number pad folds out sideways with respect to the housing about one hinge

axis to reveal an entire keyboard (figure 2) and where the second portion having a width dimension substantially the same as a corresponding width dimension of the input member (figures 1 and 2, items 5 and 9 have the same dimensions).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's portable information device with Miramontes' folding of the number pad with respect to only one hinge axis reveling an entire keyboard in order to allow the user to easily entering text data with the keyboard, as taught by Miramontes.

Regarding claims 2 and 42, Moon and Miramontes teach all the limitations of claims 1 and 41, respectively. Moon further teaches of at least one speaker to transmit audio information (figure 5, item 220).

Regarding claims 3, and 43, Moon and Miramontes teach all the limitations of claims 1 and 41, respectively. Moon further teaches of at least one microphone for receiving audio data (column 5, lines 3-5).

Regarding claims 4, 17 and 44, Moon and Miramontes teach all the limitations of claim 1, 16 and 41, respectively. Miramontes further teaches where the keyboard is a qwerty keyboard (paragraph 15, last 7 lines).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Miramontes's portable information device with Miramontes's further teachings about a qwerty keyboard in order to obtain a standard computer/typewriter English language style keyboard.

Regarding claims 10, 23 and 50, Moon and Miramontes teach all the limitations of claims 1, 16 and41, respectively. Moon further teaches where the number pads folds sideways to a right side with respect to the housing (figure 6, item 24, where the number pad folds sideways toward the right as shown).

Regarding claims 12, 25 and 52, Moon and Miramontes teach all the limitations of claims 1, 16 and 41, respectively. Moon further teaches where the number pad is coupled to the display screen with a hinge (figure 3, item 14 and column 4, lines 19-23).

Regarding claims 13, 26 and 53, Moon and Miramontes teach all the limitations of claims 1, 16 and 41, respectively. Moon further teaches of at least one function key that controls the basic functions of the device (column 24-29).

Regarding claims 14 and 27, Moon and Miramontes teach all the limitations of claims 1 and 16, respectively. Moon further teaches where the number pad is coupled to the keyboard with a hinge (see fire 6, where the axis A2 of the hinge 14, seen previously in figures 2 and 3, shows the coupling between the keyboard and display).

Regarding claims 15, 28 and 55, Moon and Miramontes teach all the limitations of claims 1, 16 and 41, respectively. Miramontes teaches of a camera (paragraph 41, figure 1, item 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Miramontes's portable information device with Miramontes's further teachings about a camera in order to provide a video phone, as taught by Miramontes.

5. Claims 29-31 and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Harries et al. (Harries, US 007102620 B2).

Regarding claim 29, Moon teaches of a hand-held electronic device (figure 4), comprising: a housing having a display screen on a first portion, the display screen configured to display text and graphical information (figure 5, item 222 and column 5, lines 39-41, where when the apparatus is in an open position, as in figure 6, it operates as a PDA and where PDA's provide graphical information); a second portion of the housing having a number dial pad thereon, the second portion coupled to the first portion (figure 5, items 22 and 20 coupled with a hinge), where the first portion folds upwards to reveal the number dial pad and the display screen (figure 5, where when the first portion 22 rotates about axis A2 of the hinge, the dial pad 20 is revealed as well as display 222) coupled to the display screen (figure 5, items 200, 240 and 260; column 5, lines 39-41, where when the apparatus is in a close position, as shown in figure 5, it operates as a telephone; thus, "number dial pad").

Moon does not specifically teach of a game pad underneath the number dial pad and completely covered when the dial pad is in a closed position, where the entire second portion folds out sideways with respect to the housing about one hinge axis to an open position to reveal the game pad.

In related art concerning a mobile electronic device Harries teaches of a game pad keyboard underneath the number dial pad such that the number pad folds out sideways to reveal the game pad keyboard (figures 1 and 2, where figure 1 shows a dial pad and underneath it a game pad is found as seen in figure 3, as it is well known in the

art that a regular keyboard functions as a game key pad, see also column 13, lines 7-12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's portable information device with Harries's game pad keyboard in order to have a smart device that can operate according to different functions given, as taught by Harries.

Regarding claim 30, Moon and Harries teach all the limitations of claim 29. Moon further teaches of at least one speaker to transmit audio information (figure 5, item 220).

Regarding claim 31, Moon and Harries teach all the limitations of claim 29. Moon further teaches of at least one microphone for receiving audio data (column 5, lines 3-5).

Regarding claim 36, Moon and Harries teach all the limitations of claim 29. Moon further teaches where the number pads folds sideways to a right side with respect to the housing (figure 6, item 24, where the number pad folds sideways toward the right as shown).

Regarding claim 37, Moon and Harries teach all the limitations of claim 29. Harries further teaches where the number pad folds sideways to a left side with respect to the housing (figure 2, this is a design choice as explained by Harries in column 7, lines 1-6).

Regarding claim 38, Moon and Harries teach all the limitations of claim 29. Moon further teaches of at least one function key that controls the basic functions of the device (column 24-29).

Regarding claims 39, Moon and Harries teach all the limitations of claim 29. Moon further teaches where the number pad is coupled to the keyboard with a hinge (see fire 6, where the axis A2 of the hinge 14, seen previously in figures 2 and 3, shows the coupling between the keyboard and display).

6. Claims 11, 24 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Miramontes and further in view of Harries.

Regarding claims 11, 24 and 51, Moon and Miramontes teach all the limitations of claims 1, 16 and 41, respectively.

Moon and Miramontes do not specifically teach where the number pads folds sideways to a left side.

Harries teaches where the number pad folds sideways to a left side (figure 2, this is a design choice as explained by Harries in column 7, lines 1-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Miramontes portable information device with Harries's folding of the number pad to the left side as a designer's choice.

Claim 5-6, 18-19 and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Miramontes and further in view of Chung et al. (Chung, US Patent No.: 6,825,832 B2).

Regarding claims 5, 18 and 45, Moon and Miramontes teach all the limitations of claims 1, 16 and 41, respectively.

Moon and Miramontes do not specifically teach where the keyboard is a game pad keyboard.

Chung teaches where the keyboard is a game pad keyboard (column 9, lines 12-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Miramontes' portable information device with Chung's game pad keyboard in order to allow the device to operate in three different modes including, game mode, as taught by Chung.

Regarding claims 6, 19 and 46, Moon, Miramontes and Chung teach all the limitations of claims 5, 18 and 45, respectively.

Chung further teaches game pad keyboard comprises a directional pad (figure 8 and column 9, lines 7-9, e.g., "cursor control 52a").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's, Miramontes' and Chung's portable information device with Chung's further teachings about a cursor control in order to provide directional pad control.

7. Claims 7-9, 20-22 and 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Miramontes Chung, and further in view of Zatloukal.

Regarding claims 7, 20 and 47, Moon, Miramontes and Chung teach all the limitations of claims 5, 18, 29 and 45, respectively.

Moon, Miramontes and Chung do not specifically teach where the game pad keyboard comprises at least one programmable action button.

Zatloukal teaches where the game pad keyboard comprises at least one programmable action button (claim 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's, Miramontes' and Chung' combined portable information device with Zatloukal's "programmable function key" in order to change the functions of the keys.

Regarding claims 8, 21 and 48, Moon and Chung teach all the limitations of claim 5, 18, 29 and 45, respectively.

Moon and Chung do not specifically teach where the game pad keyboard comprises at least one trigger.

Zatloukal teaches where the game pad keyboard comprises at least one trigger (paragraph 28, where a joystick as any regular key can provide a trigger).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Chung's combined portable information device with Zatloukal's trigger in order to provide the functions of a game.

Regarding claims 9, 22 and 49, Moon and Chung teach all the limitations of claim 5, 18 and 45, respectively.

Moon and Chung do not specifically teach where the game pad keyboard comprises a slider throttle control.

Zatloukal teaches where the game pad keyboard comprises a slider throttle control (paragraph 28, where the "joystick" provides "slider throttle control").
It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Chung's combined portable information device with Zatloukal's joystick in order to control the game, as taught by Zatloukal.

8. Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Harries and further in view of Zatloukal.

Regarding claim 33, Moon and Harries teach all the limitations of claim 29.

Moon and Harries do not explicitly teach where the game pad keyboard comprises at least one programmable action button.

Zatloukal teaches where the game pad keyboard comprises at least one programmable action button (claim 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Harries' combined portable information device with Zatloukal's "programmable function key" in order to change the functions of the keys.

Regarding claim 34, Moon and Harries teach all the limitations of claim 5, 18, 29 and 45, respectively.

Moon and Harries do not explicitly teach where the game pad keyboard comprises at least one trigger.

Zatloukal teaches where the game pad keyboard comprises at least one trigger (paragraph 28, where a joystick as any regular key can provide a trigger).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Harries's combined portable information device with Zatloukal's trigger in order to provide the functions of a game.

Regarding claims 9, 22, 35 and 49; Moon and Harries teach all the limitations of claim 5, 18 and 45, respectively.

Moon and Harries do not specifically teach where the game pad keyboard comprises a slider throttle control.

Zatloukal teaches where the game pad keyboard comprises a slider throttle control (paragraph 28, where the "joystick" provides "slider throttle control").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Harries's combined portable information device with Zatloukal's joystick in order to control the game, as taught by Zatloukal.

9. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Harries and further in view of Chung.

Regarding claim 32, Moon and Harries teach all the limitations of claim 29.

Chung further teaches game pad keyboard comprises a directional pad (figure 8 and column 9, lines 7-9, e.g., "cursor control 52a").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Harris' portable information device with Chung's cursor control in order to provide directional pad control.

10. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Harris and further in view of Miramontes.

Regarding claim 40, Moon and Harries teach all the limitations of claim 29.

Moon and Harries do not teach of a camera.

Miramontes teaches of a camera (paragraph 41, figure 1, item 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Harries' portable information device with Miramontes's camera in order to provide a video phone, as taught by Miramontes.

Response to Arguments

11. Applicant's arguments with respect to claims 1-53 and 55 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 571-272-7885. The examiner can normally be reached on 6:00 a.m. - 1:30 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone

numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either the PAIR or Public PAIR. Status information for unpublished applications is available through the Private PAIR only. For more information about the pair system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Information regarding Patent Application Information Retrieval (PAIR) system can be found at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.

Angelica Perez
Examiner

MATTHEW ANDERSON
SUPERVISORY PATENT EXAMINER

Art Unit 2618

October 2, 2007